

EHPA's response to targeted public consultation on the Technical Guidance on the application of the DNSH principle under the Social Climate Fund

The Technical Guidance on the application of the Do No Significant Harm (“DNSH”) principle in the context of the Social Climate Fund (SCF) aims to assist national authorities to comply with the DNSH principle in the preparation of their national Social Climate Plans and communicate the application of the DNSH principle in an understandable and transparent way.

The consultation is open for feedback until 23 August 2024.

EHPA's feedback on the Buildings Annex of the Technical Guidance

I. B6. Installation, maintenance and repair of renewable energy equipment

Comments on activity/asset description

The current activity description distinguishes between heat pumps (point c) and geothermal heat pumps (point i). Considering the existing variety of heat pump systems, EHPA recommends including **all types of heat pumps** in the activity description.

Heat pumps are defined in article 3, paragraph 41 of the F-gas Regulation No 517/2014 as follows: “... a piece of equipment capable of using ambient heat or waste heat from air, water or ground sources to provide heat or cooling and is based on the interconnection of one or more components forming a closed cooling circuit in which a refrigerant circulates to extract and release heat”.

Additionally, the Ecodesign revision proposal (from 27 March 2023)¹ defines heat pump heaters as “... a heater using a thermodynamic cycle capturing ambient energy, geothermal energy and/or waste heat for heat generation, possibly supplemented by an electric resistance back-up heater.”

There is a range of technological variations in a heat pump system, offering diversity in usage, thermal sources, energy sources, sinks, capacities, design, compressor types, capacity control and refrigerants:

1. Diversity in usages:
 - Space heating: human comfort, agriculture, logistics
 - Space cooling: human comfort, agriculture, data centres
 - Water heating: domestic hot water, swimming pools
 - Combi (space and water heating)
 - Multi functions (space/water heating + ventilation or space/water heating + air cooling) o district heating/cooling
 - Industrial processes

¹ Draft version of the revision of REGULATION (EU) 811/2013 laying down energy labelling requirements for space heaters to support the stakeholders' consultation process, in particular the Consultation Forum meeting of 27 April 2023.

2. Diversity in main thermal source:
 - Air
 - Water
 - Ground
 - Sewage/grey water
 - Waste heat
3. Diversity in energy sources to drive the heat pump:
 - Electricity
 - Gas
 - Waste heat can also be used to replace a part of the energy consumption
4. Diversity in types of heat pump cycles (which can have a difference in energy source):
 - a. Compression cycle:
 - Mechanical
 - Thermal
 - b. Sorption cycle:
 - Absorption
 - Adsorption
5. Diversity in sinks:
 - Air
 - Water
 - Brine
6. Diversity in capacities:
 - Small (residential) 2 to 20 kW
 - Light commercial 20 to 200 kW
 - Heavy commercial, industrial > 200 kW
7. Diversity in systems design:
 - Split systems
 - Multi-split systems
 - Monobloc (outdoor, indoor)
 - Integrated in other systems
8. Diversity in compressor types:
 - Rotary
 - Scroll
 - Piston
 - Screw
 - Centrifugal
9. Diversity in capacity control:
 - Fixed speed
 - Staged
 - Variable speed
10. Diversity in refrigerants used:
 - HFCs
 - HFOs
 - Non-fluorinated refrigerants (HC, CO₂, NH₃) and blends thereof

II. B10. Connections to district heating and cooling networks

Comments on activity/asset description

EHPA recommends adding “waste heat recovery” to the measure description, as follows: “Support for connections to district heating networks and **waste heat recovery activities**”

Comments on DNSH criteria

1. Waste heat recovery in connection with a district heating and cooling network (DHC) is compliant with the six environmental objectives listed under Article 9 of the Taxonomy Regulation and the ‘Do No Significant Harm’ (DNSH) principle stated in Article 17. The inclusion of such measure in the Technical Guidance for the Social Climate Fund is consistent with the climate and environmental objectives laid down in the EU legislation, in particular with the Renewable Energy Directive and the Energy Efficiency Directive, which both include measures regarding the use of waste heat.
2. In the context of the installation, maintenance and repair of renewable energy equipment (Point B6), the installation of heat exchanger/recovery systems is considered compliant with the DNSH principle with no additional requirements, thus we do not see any reason why waste heat recovery in the context of a DHC network should not be included in the list of DNSH compliant measures financed through the Social Climate Fund. In fact, adding the installation of waste heat and utilization equipment in the context of DHC networks will ease funding processes urgently needed to cut red tape in the context of the EU’s decarbonization efforts.
3. Waste heat recovery is already recognized as a climate mitigation and green investment measure in the Taxonomy. The Climate Change Mitigation delegated Act (Section 4.25) of the Taxonomy clearly states that waste heat brings a substantial contribution to climate change mitigation, and it is compliant with the requirements of the DNSH principle.
4. The inclusion of waste heat recovery to the measure description in B10 will help district heating networks to fulfil the Climate Change Mitigation Criteria and decrease the generation of energy from fossil fuels, while complying with Article 26 of the Energy Efficiency Directive.

Comments on evidence suggested

EHPA recommends explicitly mentioning waste heat in the evidence, as follows: “Plan to ensure more efficient consumption of primary energy, to reduce distribution losses, **to utilise waste heat** and to increase the share of renewable energy in heating and cooling supply in accordance with Article 26(5) of the Energy Efficiency Directive.”